1. An electrical component, comprising:

a capacitor having first and second ends;

a circuit coupled to the capacitor, the circuit including magnetically-coupled windings for providing capacitor-path inductance cancellation.

2. The component according to claim 1, wherein the coupled windings are discrete windings.

3. The component according to claim 1, wherein the coupled windings are integrated with the capacitor.

4. The component according to claim 1, wherein the coupled windings are wound on a former.

5. The component according to claim 4, wherein the former is substantially non-magnetic.

6. The component according to claim 1, wherein the coupled windings are formed from foil.

7. The component according to claim 1, wherein the coupled windings are formed on a flexible material.

8. The component according to claim 1, wherein the coupled windings are formed on a printed circuit board.

9. The component according to claim 1, wherein the coupled windings include a structure having an air core.

10. The component according to claim 1, wherein the coupled windings include a magnetic material.

11. The component according to claim 10, further including an adaptive inductance cancellation circuit.

12. The component according to claim 11, wherein the adaptive inductance cancellation circuit is under closed loop control.

13. The component according to claim 11, wherein the adaptive inductance cancellation circuit includes a cross-field reactor.

14. The component according to claim 1, wherein the component has three terminals.

15. The component according to claim 1, wherein the coupled windings include first and second coils and a first terminal coupled to a first end of the first coil and a first end of the second coil, a second terminal coupled to a second end of the second coil, and wherein the second end of the capacitor is coupled to a second end of the first coil.

16. The component according to claim 15, wherein a third terminal is coupled to the first end of the capacitor.

17. The component according to claim 1, wherein the coupled windings include first and second coils and a first terminal coupled to a first end of the first coil, a second terminal connected to the second end of a second coil, and wherein the second end of the capacitor is coupled to a second end of the first coil and to the first end of the second coil.

18. The component according to claim 17, wherein the first and second coils are constructed as a single coil with a tap.

19. The component according to claim 17, wherein a third terminal is coupled to the first end of the capacitor.

20. The component according to claim 1 wherein the coupled windings are wound about a package containing the capacitor.

21. The component according to claim 1, wherein the coupled windings generate a negative equivalent inductance in series with the capacitor.

22. The component according to claim 1, wherein the induction of the mutually coupled windings generates a voltage that counteracts the voltage due to the equivalent series inductance of the capacitor.

23. The component according to claim 1, wherein the coupled windings are formed from a single tapped winding.

24. The component according to claim 1, wherein the coupled windings have a mutual inductance greater than one of the self inductances.

25. The component according to claim 24, wherein the mutual inductance of the coupled windings minus the self inductance of one of the coupled windings is substantially equal to the equivalent series inductance of the capacitor plus any interconnect inductance.

26. The component according to claim 1, wherein the coupled windings have a mutual inductance that is substantially of the same magnitude as the equivalent series inductance of the capacitor plus any interconnect inductance.

27. A method of suppressing electrical signals, comprising:

coupling an inductively coupled winding circuit to a capacitor for nullifying an inductance of the capacitor electrical path.

28. The method according to claim 27, further including modeling the winding circuit with a T model having a first leg, a second leg and a third leg, wherein the third leg is coupled to the capacitor.

29. The method according to claim 28, further including providing the third leg with a negative inductance.

30. The method according to claim 29, further including modeling the capacitor as having a capacitance and an equivalent series inductance, which is canceled by the negative inductance of the third leg of the T model.

31. The method according to claim 27, further including selection of a connection point of the coupled winding circuit by finding the point that minimizes the magnitude of the output signal when an input signal is applied.

32. The method according to claim 27, further including forming discrete windings.

33. The method according to claim 27, further including integrating the capacitor and the winding circuit.

34. The method according to claim 27, further including utilizing adaptive inductance cancellation for controlling a level of magnetic coupling of windings in the winding circuit.

35. The method according to claim 27, further including setting the mutual inductance of the coupled windings larger than the self inductance of one of the windings.

36. The method according to claim 35, further including setting the difference between a mutual inductance of the coupled windings and the self inductance of one of the windings substantially equal to the equivalent series inductance of the capacitor electrical path.

37. The method according to claim 27, further including setting the magnitude of a mutual inductance of the coupled windings substantially equal to the equivalent series inductance of the capacitor electrical path.

38. A filter, comprising:

a capacitive element; and

a circuit coupled to the capacitive element, the circuit including coupled windings for providing cancellation of the equivalent series inductance of the capacitor electrical path.

39. The filter according to claim 38, wherein the coupled windings are discrete windings.

40. The filter according to claim 38, wherein the coupled windings are integrated with the capacitive element.

41. The filter according to claim 38, wherein the coupled windings are formed on a flexible material.

42. The filter according to claim 38, wherein the coupled windings include a structure having an air core.

43. The filter according to claim 38, wherein the coupled windings include a magnetic material.

44. The filter according to claim 43, further including an adaptive inductance cancellation circuit.

45. The filter according to claim 38, wherein the filter has three terminals.

46. The filter according to claim 38, wherein the coupled windings are wound about a package containing the capacitive element.

47. The filter according to claim 38 wherein the magnitude of the mutual inductance of the coupled windings is substantially equal to the equivalent series inductance of the capacitive element plus any interconnect inductance.

48. The filter according to claim 38 wherein the mutual inductance of the coupled windings is larger than the self inductance of one of the windings.

49. The filter according to claim 48 wherein the difference between the mutual inductance of the coupled windings and the self inductance of one of the windings is substantially equal to the equivalent series inductance of the capacitive element plus any interconnect inductance.

50. An electrical component, comprising:

a first pair of conductors being substantially capacitively coupled;

a second pair of conductors being substantially magnetically coupled, the first and second pair of conductors being coupled such that the magnetic induction of the second pair of conductors serves to cancel the effects of the inductance of the first pair of conductors.

51. The component according to claim 50, wherein each of the conductors in the second pair of conductors is electrically coupled to a first terminal terminal, a first conductor of the second pair of conductors is electrically coupled to a second terminal, a second

conductor of the second pair of conductors is electrically coupled to a first conductor of the first pair of conductors, and a second conductor of the first pair of conductors is electrically coupled to a third terminal.

52. The component according to claim 50, wherein a first one of the conductors of the first pair of conductors and a second one of the conductors in the second pair of conductors are formed from a single conductor.

53. The component according to claim 50 wherein the magnetic flux due to currents in the first pair of conductors links the second pair of conductors.

54. An electrical component, comprising:

a first conductor having first and second portions configured such that the first and second conductor portions are magnetically coupled; and

a pair of capacitively coupled conductors, wherein the first conductor is coupled to a first one of the pair of conductors such that the magnetic induction of the first conductor nullifies effects of the equivalent series inductance of a path from the first conductor through the pair of conductors.

55. The component according to claim 54, wherein a first end of the first conductor is coupled to a first terminal, a second end of the first conductor is coupled to a second terminal, an intermediate portion of the first conductor is coupled to the first one of the pair of conductors, and a second one of the pair of conductors is coupled to a third terminal.

56. An electrical circuit, comprising

a first subcircuit; and

a second subcircuit coupled to the first subcircuit, the second subcircuit including magnetically coupled windings for nullifying the effect of an equivalent series inductance of a path through the first subcircuit.

57. The circuit of claim 56, wherein the first subcircuit includes a capacitor.

58. The circuit of claim 56, wherein the coupled windings are formed on a printed circuit board.

59. The circuit of claim 56, wherein the coupled windings are formed on an integrated circuit.

60. The circuit of claim 56, wherein the coupled windings are formed using a printing process.

61. The circuit of claim 56, wherein the coupled windings are formed on a flexible material.

62. An electrical component, comprising:

an inductor; and

a multi-electrode network coupled to the inductor for canceling parasitic capacitance associated with the inductor.

63. The component of claim 62, wherein the electrodes of the multi-electrode network are principally capacitively coupled.

64. The component of claim 62, wherein the electrodes of the multielectrode network are both capacitively and conductively coupled.

65. A method for canceling parasitic capacitance of an inductor, comprising:

coupling a multi-electrode network to an inductor for canceling a parasitic capacitance of the inductor.

66. The method according to claim 65, further including micromachining the electrodes in the multi-electrode network.